

Customer No.: 31561
Application No.: 10/064,078
Docket No.: 7050-US-PA

In The Claims:

1. (currently amended) A field emission display, comprising:

a cathode substrate;

a plurality of column lines on the cathode substrate;

a resistance layer, covering the column lines;

a plurality of gate row lines across the column lines;

an insulation layer under the gate row lines to isolate the gate row lines, wherein the gate row lines and the insulation layer have a plurality of openings therein to expose a portion of the resistance layers, and the insulation layer further has a plurality of trenches between the gate row lines to exposes a portion of the resistance layer,

a plurality of micro-tips on the resistance layer in the openings to generate electrons; and

an anode substrate, located on the gate row lines to construct a vacuum space between the anode substrate and the cathode substrate.

2. (original) The field emission display according to claim 1, wherein the cathode substrate includes a glass substrate.

3. (original) The field emission display according to claim 1, wherein the resistance layer includes a doped silicon layer.

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4. (original) The field emission display according to claim 1, wherein the insulation layer includes an oxide layer.

5. (original) The field emission display according to claim 1, wherein the anode substrate includes a fluorescent layer and a conductive layer to accelerate electrons to bombard the fluorescent layer.

6. (original) The field emission display according to claim 1, wherein the micro-tips are cone shaped.

7. (currently amended) A cathode of a field emission display, comprising:
a cathode substrate;
a plurality of column lines on the cathode substrate;
a resistance layer covering the column lines;
a plurality of gate row lines across the column lines;
an insulation layer located under the gate row lines for isolation, wherein the gate row lines and the insulation layer has a plurality of openings therein to expose a portion of the resistance layers, and the insulation layer further have a plurality of trenches between the gate

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row lines to exposes a portion of the resistance layer ~~has a trench exposing the resistance layer~~
~~between the gate row lines;~~ and

a plurality of micro-tips located on the exposed resistance layer in the trench to generate electrons.

8. (original) The cathode of a field emission display according to claim 7, wherein the cathode substrate includes a glass substrate.

9. (original) The cathode of a field emission display according to claim 7, wherein the resistance layer includes a doped silicon layer.

10. (original) The cathode of a field emission display according to claim 7, wherein the insulation layer includes an oxide layer.

11. (original) The cathode of a field emission display according to claim 7, wherein the micro-tips are cone shaped.